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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,339	06/21/2001	William Y. Conwell	P0379	7232
23735	7590	10/19/2005	EXAMINER	
DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008			SONG, HOSUK	
			ART UNIT	PAPER NUMBER
			2135	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/888,339	CONWELL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hosuk Song	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 8/4/05.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 11,16-18 and 22 is/are allowed.
- 6) Claim(s) 1-10,12-15 and 19-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09888339</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1,3,4,6,9,12,19,20,23 are rejected under 35 U.S.C. 102(e) as being anticipated by Aucsmith(US 6,148,407).

Claim 1: Aucsmith disclose aggregating first fingerprint data and second fingerprint data wherein the first fingerprint data originated at a first source and second fingerprint data originated at second source, and the first source and the second source are remotely located in (col.7,lines 15-19). Aucsmith discloses identifying information associated with the first fingerprint data and the second fingerprint data and determining a subset of the associated information in (col.7,lines 20-23;col.8,lines 58-65).

Claims 3,4: Aucsmith disclose determining is based at least in part on a frequency occurrence of the subset and subset comprises at least one of audio, video, and image data in (col.3,lines 52-58).

Claim 6: Aucsmith disclose first set of audio fingerprint and second set of audio fingerprints in (col.3,lines 42-44,52-57).

Claims 9,19: Aucsmith discloses receiving a signal from a first broadcast at a reference receiver;generating first fingerprint data from the received signal in (col.3,lines 52-58). Aucsmith

disclose applying the first fingerprint data to a database to select associated information and receiving second fingerprint data and comparing the second fingerprint data with the associated information in (col.8,lines 58-65).

Claim 12: Aucsmith discloses receiving a signal from a first broadcast source at reference receiver, generating first fingerprint data from the received signal in (col.3,lines 52-58). Aucsmith disclose applying the first fingerprint data to a database to select associated information and receiving second fingerprint data and comparing the second fingerprint data with the associated information wherein a user device generates second fingerprint data in (col.8,lines 58-65).

Claim 20: Aucsmith discloses receiving a signal from a first broadcast source at a reference receiver, the signal comprising an embedded digital watermark in (fig.1). Aucsmith discloses decoding the digital watermark to obtain a plural-bit identifier; interrogating a database with the identifier to identify a set of fingerprints associated with the received signal in (fig.3,4). Aucsmith discloses receiving second fingerprint data and comparing the second fingerprint data with the set of fingerprints in (fig.4).

Claim 23: Aucsmith disclose receiving content comprises an embedded digital watermark in (col.4,lines 19-20,57-67 and col.5,lines 5-7). Decoding the digital watermark to obtain a plural-bit identifier in (col.4,lines 66-67;col.5,lines 1-15). Aucsmith disclose deriving a reduced bit representation of the content and accessing a database with at least the plural-bit identifier and using at least reduced bit representation of the content to help identify or authenticate the content in (col.5,lines 8-23).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2,5,10,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aucsmith (US 6,148,407).

Claims 2,10,21: Official notice is taken that vote tally is well known in the art. One of ordinary skill in the art would have been motivated to use vote tally in order to enhance the data analysis and distribution scheme.

Claim 5: Aucsmith does not specifically disclose aggregating fingerprint data within a predetermined time period. It would have been obvious to person of ordinary skill in the art to modify the invention of Aucsmith to aggregate fingerprint data within a predetermined time period in order to minimize time frame for hacker from accessing the data thus creating secure environment for user to conduct transaction.

3. Claims 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aucsmith (US 6,148,407) in view of DeMartin et al.(US 6,226,672).

Claims 7,8: Aucsmith disclose aggregating a first set of audio fingerprints provided by a first device with a set of audio fingerprints provided by a remotely located second device in (col.3,lines 42-44,52-58;col.7,lines 15-19). Aucsmith does not specifically disclose selecting a song from the plurality of songs based on a number of times a selected song matches the aggregated fingerprints. DeMartin discloses this limitation in (col.4,lines 49-62). It would have been obvious to person of ordinary skill in the art at the time invention was made to select a song from the plurality of songs based on a number of times a selected song matches the aggregated fingerprints as taught in DeMartin with fingerprint system of Aucsmith in order to match most accurate audio files from the database.

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4. Claims 13-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Aucsmith (US 6,148,407) in view of Li et al.(US 6,219,793).

Claims 13,14,15: Aucsmith discloses receiving a signal from a first broadcast source at reference receiver, generating first fingerprint data from the received signal in (col.3,lines 52-58). Aucsmith discloses applying the first fingerprint data to a database to select associated information in (col.8,lines 58-65). Aucsmith does not specifically disclose cell phone generates the second fingerprint data. Li disclose this limitation in (fig.1). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ cell phone to generate the fingerprint as taught in Li with fingerprint system of Aucsmith in order for user to conveniently process the fingerprint at any location without bound to a fixed location thus offering convenience, portability and flexibility for user to conduct data processing.

*Allowable Subject Matter*

5. Claims 11,16-18,22 remain allowed.

*Response to Applicant's Arguments*

6. Claims 1-22 are pending. The previous grounds of rejection based on the Jain et al.(US 6,185,318) patent is withdrawn in view of Applicant's arguments. However, rejection based on the Aucsmith's patent is maintained in view of applicant's arguments.

Applicant has argued that Aucsmith figures contemplate computer traits and not digital watermarking. In response: Examiner disagrees. Digital watermarking is basically an encryption process where data is embedded and hides certain information. Aucsmith disclose in col.4,lines 19-20,57-67 and col.5,lines 5-7 where certain source traits or reference values is encrypted and incorporated into the fingerprint for authentication. Examiner asserts that this is teaching of data embedding and hiding. Applicant has argued that Aucsmith does not envision that first fingerprint data originated at a first source and second fingerprint data originated at a second source, where

the first source and the second source are remotely located. In response: Examiner disagrees. Aucsmith disclose in abstract and col.1,lines 64-67 that second fingerprint is generated on an unidentified computer and fig.3 shows detecting host machine fingerprint. This implies that first and second fingerprint is generated remotely. Applicant has argued that Aucsmith does not handle broadcast signals at a reference receiver. In response: Examiner disagrees. Aucsmith disclose this limitation in col.3,lines 29-32. Applicant has argued that Aucsmith merely generate a first fingerprint and generate a second fingerprint and does not disclose aggregate first and second set of audio fingerprints. In response: Examiner disagrees. Aucsmith disclose in abstract and col.1,lines 64-67;col.3,lines 52-57 that second fingerprint is generated on an unidentified computer and fig.3,4 shows detecting and requesting fingerprint where fingerprint is collected from a remote computer.

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***USPTO Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 571-272-3857. The examiner can normally be reached on Tue-Fri from 6:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HS



Hosuk Song  
Primary Examiner  
Art Unit 2135